

Notice of Allowability

Application No.

10/010,681

Examiner

Puneet Bhandari

Applicant(s)

TAKAHASHI ET AL.

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/05/2001.
2. ☒ The allowed claim(s) is/are 1-28.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jay H. Maioli (Reg. No. 27,213) on 09/07/2005.

Regarding claim 6, line 15 replace "signal" to "circuit".

Regarding claim 23, line 32 remove the extra space after "peak".

Allowable Subject Matter

2. Claims **1-28** are allowed over prior art.

3. The following is an examiner's statement of reasons for allowance:

Regarding claims **1,6,11,16,21,23, 25 & 27** the prior art of record does not explicitly teach a detection circuit for detecting a maximum peak from the interval integration signal obtained for the intervals of time slot periods and generating a detection signal indicating a synchronization timing position corresponding to the a position of the detected maximum peak, the detection signal being used to extract the effective symbol period with a precise timing corresponding to the position of the maximum peak. This limitation, in conjunction with all the limitations of the independent claims, has not been disclosed, taught or made obvious over the prior art of record.

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Regarding claims **2-5**, since these claims further limit claim 1, hence are also allowable over prior art of record.

Regarding claims **7-10**, since these claims further limit claim 6, hence are also allowable over prior art of record.

Regarding claims **12-15**, since these claims further limit claim 11 hence are also allowable over prior art of record.

Regarding claims **17-20**, since these claims further limit claim 16, hence are also allowable over prior art of record.

Regarding claim **22**, since this claims further limit claim 21, hence is also allowable over prior art of record.

Regarding claim **23**, since this claims further limit claim 24, hence is also allowable over prior art of record.

Regarding claim **25**, since this claims further limit claim 26, hence is also allowable over prior art of record.

Regarding claim **27**, since this claims further limit claim 28, hence is also allowable over prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mizoguchi et al (US 6,658,063), Sudo (US 6,647,025), Lee (US 6,373,861), Tsuruoka (6,549,589), Sudo et al. (US 6,714,511) and Seki (US 5,602,835).

Sudo et al. (US 6,714,511) teaches a delaying circuit (delayer 108), a calculating circuit (correlator 109), a frame guard removing circuit (guard interval eliminator) refer fig 5. Sudo et al. (US 6,714,511) does not explicitly teach a detection circuit for detecting a maximum peak from the interval integration signal obtained for the intervals of time slot periods and generating a detection signal indicating a synchronization timing position corresponding to the a position of the detected maximum peak, the detection signal being used to extract the effective symbol period with a precise timing corresponding to the position of the maximum peak.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Puneet Bhandari whose telephone number is 571-272-2057. The examiner can normally be reached on 9.00 AM To 5.30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Puneet Bhandari
Examiner
Art Unit 2666

PB

Seema S. Rao
SEEMA S. RAO 9/14/05
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600